

EXHIBIT 6

Chronic Pain Management

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October 11, 2002

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OVERVIEW

Background

Ingenix Medical Education has been asked to prepare a proposal for an unrestricted educational grant to develop an accredited educational program on effective chronic pain management. The program will explore the causes of chronic pain and the constellation of distinctive and predictable symptoms that characterize chronic pain in the elderly, depression and chronic pain, and addiction issues with chronic pain. The program will also reference current consensus guidelines and recommend strategies for the treatment and management of patients with chronic pain.

Chronic Pain

Pain is one of the most common reasons for a patient to seek medical care. Unfortunately, there are no objective biological markers of pain. Therefore, the most accurate evidence of pain and its intensity is based on the patient's description and self-report. An estimated 50 million patients suffer from chronic nonmalignant pain, or pain of greater than 3 months' duration that is not related to cancer (Wells-Federman CL. Care of the patient with chronic pain. Part I. Clin Excell Nurse Pract 1999;3(4): 192-204). Pain results in a staggering 40 million physician office visits per year, accompanied by approximately 4 billion lost workdays, \$65 billion lost work productivity and \$3 billion in over-the-counter analgesics. Above all, it results in a dramatically decreased quality of life for the patient who experiences it.

(<http://www.ninds.nih.gov/whatsnew/presswhn/pain-sec.htm>)

Chronic Pain in the Elderly

Chronic pain syndromes are common in the elderly and include cancer-related pain, postherpetic neuralgias, painful diabetic neuropathy, and central poststroke pain. Most pain syndromes can be classified into four basic categories (table 1). Older persons are more likely to have chronic

conditions associated with pain such as arthritis, bone and joint disorders, and back problems.

Study results suggest that 25-50% of community dwelling elders experience pain and 45-80% of nursing home residents have substantial pain that is undertreated. According to a survey conducted for the National Council on Aging, nearly 1 in 5 persons in the United States aged 65 or older reports taking analgesic medications several times a week and 3 in 5 of these say they have taken prescription pain medication for more than 6 months.

The consequences of chronic pain among older people are numerous. Depression, decreased socialization, sleep disturbance, impaired ambulation and increased healthcare utilization have all been associated with the presence of pain in older people. Although less thoroughly described, many other conditions are potentially worsened by the presence of pain, including gait disturbances, slow rehabilitation, and adverse effects from multiple drug prescriptions.

Psychosocial factors are known to be associated with pain in older patients. Studies have shown that older adults with good coping strategies have significantly lower pain and psychological disability. There is a very high degree of comorbidity between pain and depression, which itself is a widespread problem among older people. Although the diagnosis of major depression is most common in elders who live in institutions, symptoms of depression such as feelings of despair, irritability, fatigue and loneliness are common in elders living in the community. When both pain and depression are present, each seems to exacerbate the other. Both pain and aging also increase the risk for suicide.

Table 1. Pathophysiologic Classification of Chronic Pain

Nociceptive pain
<ul style="list-style-type: none"> • Arthropathies (e.g., rheumatoid arthritis, Osteoarthritis, gout, posttraumatic

<ul style="list-style-type: none"> • arthropathies, mechanical neck and back syndromes • Myalgia (e.g., myofascial pain syndromes) • Skin and mucosal ulcerations • Nonarticular inflammatory disorders (e.g., polymyalgia rheumatica) • Ischemic disorders
<p>Neuropathic pain</p> <ul style="list-style-type: none"> • Postherpetic neuralgia • Trigeminal neuralgia • Painful diabetic polyneuropathy • Post-stroke pain (central pain) • Postamputation pain • Myelopathic or radiculopathic pain (e.g., spinal stenosis, arachnoiditis, root sleeve fibrosis) • Atypical facial pain • Causalgia-like syndrome (complex regional pain syndromes)
<p>Mixed or undetermined pathophysiology</p> <ul style="list-style-type: none"> • Chronic recurrent headaches (e.g., tension headaches, migraine headaches, mixed headaches) • Vasculopathic pain syndromes (e.g., painful vasculitis)
<p>Psychologically based pain syndromes</p> <ul style="list-style-type: none"> • Somatization disorders • Hysterical reactions

Although it is thought that nobody dies from pain, in fact, pain can have a negative impact on the immune system. This is a problem of vital importance in elderly patients who may already have a reduced immune response due to other disorders.

Geriatric pain is frequently underidentified and undertreated, resulting in needless suffering among patients who may already face significant impairment from their underlying disorders. Because pain is a subjective complaint, physicians and other health care professionals usually rely upon the patients' self-report before evaluating or managing pain. Patients who have a dementia or an aphasia may not be able to tell their physician about their pain.

According to the American Geriatrics Society (AGS), pharmacologic therapy is most effective for chronic pain in older persons when it is combined with nonpharmacologic approaches.

Nonpharmacologic pain management strategies encompass a broad range of treatments and physical modalities. Education programs, cognitive-behavior therapy, exercise programs, acupuncture, transcutaneous nerve stimulation, chiropractic, heat; cold, message, relaxation and distraction techniques have each been helpful for some patients. The most common treatment for pain in older persons is the use of analgesic drugs (table 2).

Table 2. Non-Narcotic Analgesic Drugs and Their Uses	
<i>Medication</i>	<i>May be Useful For</i>
Aspirin (Anacin, Bayer, Bufferin, Excedrin)	Headache, muscle ache, fevers arthritis pain and inflammation. May reduce the risk of heart attack and stroke.

Acetaminophen (Tylenol, Feverall, Temptra)	Headache, muscle ache, backache, fever, and arthritis pain (especially degenerative arthritis)
Ibuprofen (Advil, Motrin, Nuprin)	Headache, muscle ache, fever, spasms, backache, and arthritis pain
Ketoprofen (Actron, Orudis KT, Orudis)	Headache, muscle ache, fever, cold or flu aches
Naproxen Sodium (Aleve and Naprosyn)	Headache, muscle ache, fever, backache, arthritis pain and inflammation
Cox-2 Inhibitors (Celebrex, Vioxx, Mobic)	All useful for muscles aches, joint pain, arthritis, pain and inflammation

Depression and Chronic Pain

Depression is one of the most frequent mental health problems in the United States and one of the most common problems experienced by patients with chronic pain. Depression costs more than \$43 million annually, in lost earnings, treatment costs, and workplace costs. The prevalence of major depression in patients with low back pain is 3-4 times greater than in the general population. Approximately 60% of patients with depression report pain symptoms at the time of diagnosis. In patients with chronic pain referred for evaluation to comprehensive pain programs, 8-50% have been reported to have current major depression.

Depressed chronic pain patients report greater pain intensity, less life control, and more use of passive-avoidant coping strategies. They also describe greater interference from pain and exhibit more pain behaviors than chronic patients without depression. In patients with rheumatoid arthritis, depressive symptoms were significantly associated with negative health and functional

outcomes as well as increased health service utilization. For example, elders who have arthritis and depression often show medical procrastination and poor medical compliance. This means that elders will delay seeking medical care, and they may neglect to follow the advice of medical professionals. Medical procrastination and poor compliance, in turn, can lead to exacerbated and prolonged medical illnesses. Also, the dual effects of arthritis and depression can lead to elders becoming disengaged from the people and activities that would usually help them sustain a high quality of life.

For patients with chronic pain, depression can arise from several sources. The following are some sources of depression (table 3):

Table 3. Sources of Depression in Chronic Pain Patients	
Losses	While grief in response to loss is normal, depression can result when one fails to cope with the losses.
Learned helplessness	Develops when pain and disability persist and the patient feels there is absolutely nothing he/she can do about it.
Irrational beliefs and distorted thinking	Typically involves rigid absolutist <i>musts</i> and <i>demands</i> . These can be applied to oneself or to one's situation in life.
Pain medication	In particular, the opioid pain relievers when taken in sufficient quantity over an extended period of time can not only depress pain awareness and other mental activities, but can also depress mood.
Chemical imbalances in the brain	Some people are biologically prone (i.e. genetically predisposed) to develop problems with depression.

The consequences of unrecognized and untreated major depression are substantial. The most severe consequence of major depression is suicide. For example, patients suffering from chronic

pain syndromes including migraine, chronic abdominal pain, and orthopaedic pain syndromes report increased rates of suicidal ideation, suicide attempts, and suicide completion. In a study of patients who attempted suicide, 52% suffered from a somatic disease and 21% were taking analgesics daily for pain. In another similar study, patients with chronic pain completed suicide at 2-3 times the rate in the general population.

Although depression can take different forms, the following are common symptoms and characteristics:

- Feelings of sadness
- Guilt feelings
- Discouragement regarding the future
- Feelings of failure and self-blame
- Decreased satisfaction and enjoyment of former activities
- Decreased interest in being around other people
- Decreased energy and motivation
- Difficulties sleeping at night
- Constantly feeling tired
- Decreased appetite or excessive eating
- Decreased interest in sex
- Thoughts of suicide
- Feelings of helplessness and hopelessness

Depression is associated with severe consequences and is very responsive to treatment. Early identification of depression, along with early intervention to prevent depression, can help improve mental health and prolong productivity. Depression should be treated aggressively and not simply “understood” as an expected outcome of chronic pain.

Addiction Issues with Chronic Pain

Seven million people suffer from intractable pain that utilize opioids (table 4) for pain relief; however, only 4,000 physicians in the United States are willing to prescribe opioids for these people. One of the key reasons for this nationwide hesitation to prescribe opioids is a concern regarding addiction and possible diversion for non-medical uses. Addiction is defined by the American Society of Addiction Medicine as the abuse of any psychoactive substance with compulsion and loss of control despite adverse consequences. The American Medical Association Task Force defines addiction as a chronic disorder characterized by the compulsive use of a substance resulting in a physical, psychological, or social harm to the user and continued use despite the harm. In other words, addiction involves a dependence upon a drug to experience euphoria despite harm to oneself or others.

Table 4. Examples Of Medical Opioids (Narcotic Analgesics)	
meredipine (Demerol)	oxycodone (Percocet, Tylox, OxyContin)
hydrocodone (Vicodin)	levorphanol (Levo-Dromoran)
hydromorphone (Dilaudid)	methadone (Dolophine)
morphine (MS-Contin)	fentanyl (Duragesic)
codeine (Tylenol #3, #4)	butorphanol (Stadol)
pentazocine (Talwin)	

It was previously thought that addiction was demonstrated by the presence of tolerance and withdrawal (developing signs of illness/discomfort when the substance is unavailable). It is now thought that, while these two factors may be important signs of dependence on recreational drugs (alcohol, cocaine), they do not indicate dependence on medical drugs. Physical dependence, tolerance, and addiction are discrete and different phenomena that are often confused. Since their clinical implications and management differ markedly, it is important that uniform definitions, based on current scientific and clinical understanding, be established in order to promote better care of patients with pains and other conditions where the use of dependence producing drugs is appropriate, and to encourage appropriate regulatory policies and enforcement strategies. The American Academy of Pain Medicine, the American Pain Society, and the American Society of Addiction Medicine recognize the following definitions and recommend their use (table 5):

Table 5. Recognized and Recommended Definitions	
Addiction	A primary, chronic, neurobiologic disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm and craving.
Physical Dependence	A state of adaptation that is manifested by a drug class specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist.
Tolerance	A state of adaptation in which exposure to a drug induces change that result in a diminution of one or more of the drug's effects over time.

Behaviors suggestive of addiction may include the following: inability to take medications according to an agreed upon schedule, taking multiple doses together, frequent reports of lost or stolen prescriptions, doctor shopping, isolation from family and friends, and/or use of non-prescribed psychoactive drugs in addition to prescribed medications. Other behaviors which may raise concern are the use of analgesic medications for other than analgesic effects, such a sedation, an increase in energy, a decrease in anxiety, or intoxication; non-compliance with recommended non-opioid treatments or evaluations; insistence on rapid onset formulations/routes of administration; or reports of no relief whatsoever by any non-opioid treatments.

The most important predictor of continued abuse or addiction is previous substance abuse. If a physician prescribes a pain medication in good faith, anyone who leaves that physician's care with an addiction probably already had a problem when the treatment began. If substance abuse or addiction is strongly suspected, the patient should be referred for an evaluation by a psychologist or psychiatrist who has experience working with chronic pain patients. Inappropriately labeling patients as addicts can alienate them from their caregivers and family, deepen their isolation, and prolong their suffering. Denied the pain treatment to which they are entitled, patients often feel isolated, anxious, and even desperate. The obsessive and manipulative behaviors that these feelings engender, which can sometimes be confused with addiction, are called pseudoaddiction.

Most specialists in pain medicine and addiction agree that patients with prolonged opioid therapy usually do develop physical dependence and sometimes develop tolerance, but do not usually develop addictive behavior. Addiction is a primary chronic disease and exposure to drugs is only one of the etiologic factors in its development. Addiction is recognized by the observation of one or more of its characteristic features (see table 5). An individual's behaviors that may suggest addiction sometimes are simply a reflection of unrelieved pain or other problems unrelated to

addiction. Therefore, good clinical judgment must be used in determining whether the pattern of behaviors signal the presence of addiction or reflects a different issue.

The most prescribed alternatives for opioids are anti-inflammatory agents. When taken over extended periods of time, as required for intractable pain, anti-inflammatory agents can cause internal bleeding, ulcers, and kidney, liver, or stomach damage. One study showed that 17,000 deaths resulted from these alternatives in one year, whereas deaths resulting from opioids were described as “vanishingly small” by Dr. Brian Goldman, a University of Toronto researcher who has studied prescription drug diversion.

The difference between pain patients and addicts seeking euphoria is that patients can take increasing doses of opioids, as pain persists, without serious side effects while addicts can not. As intractable pain continues to persist, usually a sign of disease progression, pain patients may require higher increments of opioids to relieve pain. Fortunately, opioids taken for intractable pain do not have a ceiling dosage – a dosage where the drug can no longer treat a higher level of pain. Although not proven, researchers believe that pain patients and addicts respond to opioids differently because the nervous pathway that transports intractable pain develops little to no tolerance to opioids. The nervous pathways that transport acute pain and pleasure do develop significant tolerance to opioids.

Conclusion

The management of pain is becoming a higher priority in the United States. Over the last several years, health-policy makers, health professionals, regulators and the public have become increasingly interested in the provision of pain therapies. This is evidenced, in part, by the U.S. Department of Health and Human Services’ dissemination of Clinical Practice Guidelines for the management of acute pain and cancer pain. These publications, which have been endorsed by the

American Academy of Pain Medicine and the American Pain Society, state that opioids are another option to be considered as part of a pain management plan.

Although many strategies exist to treat chronic noncancer pain, there is currently no nationally accepted consensus for treatment. Since chronic pain is not a single entity but may have myriad causes and perpetuating factors, the strategies and options vary from behavioral methods and rehabilitation approaches to the use of different medications. Nonpharmacologic techniques, such as physical therapy, occupational therapy, biofeedback, relaxation therapy, meditation, and hypnosis, are usually used as an adjunct to medication.

Target Audience

OBJECTIVES

The target audience for this educational initiative will be the United Behavioral Health provider network.

- Enable healthcare providers to appropriately recognize, diagnose, and manage chronic pain
- Educate healthcare providers on the updated consensus guidelines for the management of chronic pain

- Discuss various treatment options, including pharmacologic and nonpharmacologic therapies, and patient management strategies for chronic pain
- Optimize patient care in the treatment of chronic pain
- Enhance the reputation of United Behavioral Health as a leader in providing solutions and

PROGRAM DESCRIPTION

practice parameters founded upon evidence-based medicine

The program will be presented in a teleconference format. The series of teleconferences will include 3 five-teleconference modules, each on a different subject related to the management of chronic pain. The subjects will include: The management of chronic pain in the elderly, depression and chronic pain, and addiction issues with chronic pain. Each of the three topics will be presented as one-hour teleconferences conducted on 5 different days to allow flexibility for the 4 time zones. United Behavioral Health network providers will be able to participate during any of the 5 calls, as the content will be the same for all of teleconferences. The total number of teleconferences held will be fifteen (five teleconferences per subject).

Participants will receive educational materials prior to the teleconferences in order to create an optimal learning environment. After the didactic portion of the teleconferences the faculty will answer questions from the participants. The teleconferences will be accredited and participants will be able to earn continuing education credits. After the series of live teleconferences are

presented, an archived teleconference (slides and audio) will be made available for future viewing on the web.

Invitations will be sent via e-mail as will teleconference reminders. In addition, participants will confirm attendance via e-mail.

The teleconference series will be immediately followed by an educational monograph that will be sent out to all program participants. The monograph will be 24 pages in length and will provide an opportunity to discuss the program content in greater detail and will serve as a future reference tool. All three subjects (the management of chronic pain in the elderly, depression and chronic pain, and addictive issues with chronic pain) will be covered in the monograph. The monograph will also be accredited and participants will receive continuing education credit upon the successful completion of a post-test included with the monograph. The monograph will also be made available on the same website that will house the archived teleconference.

MANAGEMENT OF CHRONIC PAIN IN THE ELDERLY OUTLINE

Below please find preliminary outlines of the didactic components of the teleconference programs:

(Adapted from the American Geriatric Society Panel on Chronic Pain in Older Persons 1998 and the 2002 Executive Summary; 2002 Complete Guidelines in Press)

I. Introduction

- A. Chronic pain—Chronic or episodic pain of a duration or intensity that adversely affects the function or well being of the patient, attributable to any nonmalignant etiology
- B. Individualized treatment must be implemented with regard to each patient's situation
- C. The older population has not been included in a significant number in pain management studies
- D. There are unique challenges in the treatment of chronic pain in the older population

II. Epidemiology

- A. One in five older Americans is taking an analgesic regularly
- B. 45% of older persons have visited 3 or more doctors in the past 5 years because of pain, suggesting that these patients are not receiving adequate pain management

III. Assessment

- A. All older patients should be screened for chronic pain (neuropathic vs non-neuropathic) on evaluation
- B. Any impact on physical function, psychological function, or quality of life should be considered significant problem
- C. A measurement of the patient's pain should be obtained, either with a zero to ten scale, faces scales, or pain thermometers

IV. Non pharmacological treatment

- A. Stimulation therapy by use of a transcutaneous electrical nerve stimulation (TENS)
- B. Chiropractic and acupuncture may work for some patients
- C. Cognitive behavioral therapy
 - 1. Educate the patient on reasons and types of pain
 - 2. Educate the patient on techniques that may relieve pain
 - a. Relaxation, hypnosis, and distraction techniques may limit the need for medication
 - b. Hot and cold compresses

c. Exercise may provide pain relief with appropriate instruction

V. Pharmacological treatment

A. Dosing and administration of medications

1. Baseline or around the clock administration of analgesics to decrease constant pain throughout the day
2. Breakthrough analgesic medications to immediately treat sharp increase in pain
3. Medications should be started at a low dose and gradually increased for pain relief

B. Side effects may increase in the elderly population

1. Titration of medication is necessary to avoid complications
 - a. Titration should be adjusted for the specific drug and pharmacokinetic profile
 - b. Side effects should be anticipated and prevented or minimized

C. To achieve the greatest pain management response and minimal side effects, combination therapy may be used

D. NSAIDs

1. Short-acting preparations should be used to avoid accumulation
2. NSAIDs should be avoided in patients who require long term daily therapy
3. NSAIDs should be avoided in patients with a history of GI bleeding
4. Patients >60 years old taking NSAIDs are at a 3-4% risk for GI bleeding and those with a history of GI bleeding have a 9% risk

E. Opioids are effective, have a low addiction potential, and may have fewer long-term side effects than other analgesic medications regimens in older persons

1. Rapidly acting medications
 - a. Establish a baseline of algesic medication
 - b. Breakthrough and spontaneous pain treatment
2. Long-acting preparations should only be used for continuous chronic pain
3. Incidence pain should be pre-treated before the event occurs
4. Side Effects

- a. Constipation
 - (i) The proactive use of stool softeners and stimulants should be a part of the pain management protocol to maintain proper bowel function
 - (ii) Encouragement of non-pharmacological methods are warranted (exercise and water intake)
- b. Nausea
 - (i) Nausea may fade with continued use
 - (ii) Medications with anti-emetic actions may be used
 - (iii) Different pain relief medication may be tried
- c. Patients should be monitored for changes cognitive changes
- d. Hazardous psychomotor situations should be avoided (driving and stairs) until the patients has become accustomed to the medication
- e. Respiratory depression may occur in high initial doses or a quick titration schedule
- 5. Meperidine should not be used because of decreased metabolite clearance in renally impaired patients that may alter mental status
- F. Antidepressants may have greater anticholinergic side effects in the older population
- G. Anti-arrhythmics should be avoided in patients with preexisting heart disease
 - 1. ECG should be preformed baseline
 - 2. ECG should be performed at follow-up
- H. Anticonvulsants
 - 1. May cause somnolence, ataxia, dizziness, and leukopenia
 - 2. Carbamazepine is agent of choice in trigeminal neuralgia
- VI. Medication cost may hinder patients on fixed incomes from receiving treatment
- VII. Goals of treatment
 - A. Improve the patient's level of functioning
 - B. Decrease rate of physical deterioration

- C. Decrease pain perception
- D. Improve the patient's sense of well-being
- E. Improve family and social relationships
- F. Implement lifestyle changes to accommodate patient's physical condition
- G. Individualize each patient's therapy to maximize the patient's quality of life

VIII. Conclusions

DEPRESSION AND CHRONIC PAIN OUTLINE

- I. Introduction
 - A. Depression can occur in as many as 50% of patients with chronic pain; depression is the most important variable associated with persistent chronic pain
 - B. Correlates of depression in chronic pain patients
 - C. Chronic pain disorder may be nociceptive (inflammatory), neuropathic* (peripheral and central), and myofascial
- II. Chronic pain-associated depression: antecedent or consequence of chronic pain?
- III. Vulnerable Populations
 - A. Patients with pain-related medical illnesses
 - 1. Cancer
 - 2. HIV
 - 3. Diabetes
 - 4. Coronary heart disease
 - 5. Headaches
 - 6. Neuralgia
 - 7. Osteoarthritis
 - 8. Lower back pain
 - B. Women
 - 1. Chronic fatigue syndrome
 - 2. Fibromyalgia
 - 3. Interstitial cystitis
 - 4. Irritable bowel syndrome

- C. Cranio-facial pain
- D. Elderly
- E. Trauma patients
- IV. Diagnosis
 - A. Models and measurements of depression in chronic pain
 - 1. Center for Epidemiological Studies–Depression Scale (CES-D)
 - 2. Beck Depression Inventory
 - B. Alternative diagnostic criteria for major depressive disorder in patients with chronic pain
- V. Consequences of unrecognized depression
 - A. Depression is associated with disability in patients with chronic pain
 - B. Depression and chronic pain are independent a risk factors for suicide
- VI. Treatment and Management
 - A. Pharmacotherapy
 - 1. Antidepressants
 - 2. Anticonvulsants
 - B. Psychotherapy
 - C. Combination treatment
 - D. Integrated Approach to Treatment

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CHRONIC PAIN AND ADDICTION OUTLINE

- I. Introduction
 - A. Chronic pain—chronic or episodic pain of a duration or intensity that adversely affects the function or well being of the patient, attributable to any nonmalignant etiology
 - B. Seven million people suffer from chronic pain, yet few physicians are willing to treat these patients
 - C. Many clinicians are anxious about prescribing opioids for extended periods of time for fears of inducing addiction
 - D. Effective pain management is an integral and important aspect of quality medical care and should be treated aggressively
- II. Pathophysiology
 - A. Stimulation of nociceptors, is the first step in the pain sensation, although the exact mechanism is not understood
 - B. Differing types of pain
- III. Addiction, tolerance, and physical dependence (Definitions, similarities, differences, and examples of each)
 - A. Addiction is often confused with functional impairment, tolerance, and physical dependence
 - B. Patients with chronic pain treated over extended periods of time may develop tolerance and physical dependence, but these patients do not become addicted
- IV. Pharmacological treatment
 - A. Opioids

1. In appropriately selected patients, opioids are the most effective way to treat pain
 2. Many different preparations available
 - a. Long-acting preparations decrease the need for multiple daily dosing and should only be used for chronic pain
 - b. Rapidly acting medications alleviate breakthrough pain
 3. Side effects
 - a. Respiratory depression is overcome quickly and does not occur with adequate dose titration
 - b. To maintain proper bowel function, the proactive use of stool softeners and stimulants should be a part of the pain management protocol
 - (i) Encouragement of non-pharmacological methods (exercise and water intake)
 - c. Sedation and nausea usually dissipate with continued use
 - (i) Medications with anti-emetic actions may be used
 - (ii) Different pain relief medication may be tried
- B. Non-opioids
1. NSAIDS (naproxen, ibuprofen, etc.) NSAIDS should be avoided in patients with a history of GI bleeding
 - a. Patients >60 years old taking NSAIDS are at a 3-4% risk for GI bleeding and those with a history of GI bleeding have a 9% risk.
 - b. OTC formulations, long dose interval formulations, and inexpensive
 2. COX-2 inhibitors (rofecoxib and celecoxib)
 - a. Decreased ulcers compared to other NSAIDS
 - b. Extended dosing interval, although expensive
 3. Antidepressants (desipramine, amitriptyline, nortriptyline, fluoxetine, paroxetine)
 - a. Non-addictive and tolerance does not occur
 - b. Does not cause GI bleeding

- c. May work by increasing norepinephrine and serotonin at nerve endings and increasing pain inhibition
- d. Side effects/disadvantages
 - (i) Drowsiness, constipation, urinary retention, dry mouth, blurred vision, and sexual dysfunction
 - (ii) Not for musculoskeletal or back pain
- 4. Anticonvulsants or antiepileptics (carbamazepine, valproic acid, gabapentin)
 - a. A promising, non-addictive agent in chronic pain management
 - b. Used for decreasing frequency of migraine headaches, may work for decreasing the severity of migraines
 - c. Carbamazepine—FDA labeled for trigeminal neuralgia
 - d. Abrupt discontinuation can be dangerous
- 5. Antiarrhythmics (Mexiletine)
 - a. Inhibit premature firing of damaged nerves that causes pain
 - b. Due to safety concerns, mexiletine is only antiarrhythmic used from this class
 - c. Side effects/disadvantages—dizziness, anxiety, unsteady gait
- 6. Corticosteroid injection therapy
 - a. Effective in providing analgesia
 - b. Provide local relief of pain
 - c. Long term therapy may cause complications
 - d. Dose tapering may be needed after long term therapy
- 7. Regional sympathetic blockade (lumbar sympathetic block, stellate ganglion block, interavenous regional block)
 - a. Effective
 - b. Side effects/disadvantages
 - (i) Site infections
 - (ii) Sensory or motor block

(iii) Filed blockage of sympathetic outflow

(iv) Local anesthetic toxicity

V. Non pharmacological treatment

A. Stimulation therapy by use of a transcutaneous electrical nerve stimulation (TENS)

B. Chiropractic and acupuncture may work for some patients

C. Cognitive behavioral therapy

1. Educate the patient on techniques that may relieve pain

2. Relaxation, hypnosis, and distraction techniques may limit the need for medication

3. Exercise may provide pain relief with appropriate instruction

VI. Treatment and substance abuse

A. Opioid treatment in abusive patients is a legitimate medical concern

B. In the abusive patient, non opioid and/or non pharmacological treatment may be a better therapeutic option than possible addicting therapy

C. The use of opioids to treat an addiction is only legal by a registered narcotic treatment program

VII. Conclusion

A. Opioid addiction does not occur in the chronic pain patient, although physical dependence and tolerance do occur

B. There are many different therapeutic options, which addiction will not be a factor

ROLE OF INGENIX

C. Pain, no matter the source, can and should be treated with the various medications that are available

Content Development and Approval Process

IME will work closely with the faculty to elaborate on the aforementioned draft outline. IME will carefully review the revised outline to ensure scientific integrity and direction. All portions of the didactic component of the teleconference series and the monograph will be approved by the faculty and CEU provider, as well as undergo a review by a representative from United Behavioral Health.

Audience Recruitment

Announcements to participate in the teleconference will be mailed to select United Behavioral Health network providers. The invitation will contain dates/times of the teleconferences, a summary of the content, instructions for registration and participation in the teleconferences, call-in number and CEU information.

To encourage participation, CEU credit will be offered to those who participate in the teleconference and complete the teleconference posttest, which will be e-mailed, mailed or faxed to the participants along with other CEU material before the teleconference.

Rollout

Audience participants may pre-register, either several days/weeks prior to the teleconference of up to 1 hour before the teleconference. All pertinent information will be gathered from each participant at registration (e.g. name, address, phone/fax numbers, e-mail address, specialty area if applicable). The monograph will be distributed to the individuals who initially participated in the teleconference series. Additional monographs will be distributed to healthcare providers

PROJECT ESTIMATES

requesting the monograph.

PROJECT ESTIMATE

PROJECT TITLE: United Behavioral Health Management of Chronic Pain in the Elderly Teleconference Series

PROJECT DESCRIPTION

This estimate is based on the development of 5 CME-accredited teleconferences for United Behavioral Health providers.

Fee estimate includes:

- Account management, medical direction, program management, production, library services, editorial, word processing and administrative support
- CME accreditation fee
- Pre-registration

- Design, layout and printing of rep postcard and invitation
- Faculty Honorarium (5 x \$2,000)
- Teleconference lines, registration, reports and transcription
- Meeting materials to include: slide handout, program evaluation and posttest
- Postage mailing and fulfillment
- Miscellaneous services include, bulk copying, information resources, FedEx, permissions, supplies and telephone/fax fees

TOTAL ESTIMATE

\$191,900

ESTIMATE ACCEPTED AND AGREED TO BY

AGENCY: _____
(Signature) (Date)

CLIENT: _____
(Signature) (Date)

PROJECT ESTIMATE

PROJECT TITLE: United Behavioral Health Management of Chronic Pain in the Elderly
Monograph

PROJECT DESCRIPTION

This estimate is designed for a 24-page CME-accredited monograph based on the teleconferences for United Behavioral Health providers.

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- CME accreditation fee
- Design, graphic layout and printing (quantity: 2500)
- Honorarium
- Postage mailing and fulfillment
- Miscellaneous services include, bulk copying, citation verification, information resources, FedEx, permissions, supplies and telephone/fax fees
- Writer’s Fee

TOTAL ESTIMATE

\$127,625

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AGENCY: _____
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CLIENT: _____
(Signature) (Date)

PROJECT ESTIMATE

PROJECT TITLE: United Behavioral Health Management of Chronic Pain in the Elderly CME Website

PROJECT DESCRIPTION

This estimate is based on the development and maintenance of a CME website. Website will include audio from teleconferences, slides, monograph and posttests.

Fee estimate includes:

- Coordination of CME requirements with accreditor
- Account management, program management, word processing, production, editorial and administrative support
- Development of BRC/postcard
- Layout for web application
- CME Fee (designation, maintain records, assurance)
- CME reviewer's fee
- Host server: set-up includes software and programming
- Automated test correction and credit availability
- Posting (depending on extent of work to be done)
- Production of Business Reply Card or postcard (graphic design and layout)
- Audio clip, slide and web page fees
- Maintenance for 36 months
- Miscellaneous services include, bulk copying, information resources, messenger service, permissions, and telephone/fax fees

TOTAL ESTIMATE

\$105,850

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PROJECT ESTIMATE

PROJECT TITLE: United Behavioral Health Depression and Chronic Pain Teleconference Series

PROJECT DESCRIPTION

This estimate is based on the development of 5 CME-accredited teleconferences for United Behavioral Health providers.

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PROJECT ESTIMATE

PROJECT TITLE: United Behavioral Health Chronic Pain and Addiction Teleconference Series

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This estimate is based on the development of 5 CME-accredited teleconferences on for United Behavioral Health providers.

Fee estimate includes:

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